CONFIDENTIAL **** ECISIONAL DOCUMENT **** SUMMARY SCORESHEET **** **** FOR COMPUTING PROJECTED HRS SCORE ****



**** Do Not Cite or Quote ****

Site Name: Norda

Region: 2

City, County, State: East Hanover, Morris

Evaluator: Ray Pogwist

NJ

EPA ID#: NJD001307115

Date: 3/17/2010

Lat/Long: 40.8099872/74.381964

T/R/S:

Congressional District:

This Scoresheet is for: Other

Scenario Name: Reassessment

Description:

	S pathway	S ² pathway
Ground Water Migration Pathway Score (Sgw)	0	0
Surface Water Migration Pathway Score (S _{sw})	0	0
Soil Exposure Pathway Score (S _s)	2.04	4.1616
Air Migration Score (Sa)	0	0
$S_{gw}^2 + S_{sw}^2 + S_{s}^2 + S_a^2$		4.1616
$(S_{gw}^2 + S_{sw}^2 + S_{s}^2 + S_a^2)/4$	The state of the s	1.0404
$/(S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2)/4$		1.02

υ Pathways not assigned a score (explain):

DECLASSIFIED

TABLE 3-1 GROUND WATER MIGRATION P	ATHWAY SCORESHEET	<u> </u>
Factor categories and factors	Maximum Value	Value Assigned
Aquifer Evaluated:	•	
Likelihood of Release to an Aquifer:		
1. Observed Release	550	0
2. Potential to Release:		•
2a. Containment	10	
2b. Net Precipitation	10	
2c. Depth to Aquifer	5	·
2d. Travel Time	35	
2e. Potential to Release [lines 2a(2b + 2c + 2d)]	500	•
3. Likelihood of Release (higher of lines 1 and 2e)	550	0
Waste Characteristics:		
4. Toxicity/Mobility	(a)	•
5. Hazardous Waste Quantity	(a)	
6. Waste Characteristics	100	
Targets:		
7. Nearest Well	(b)	
8. Population:		
8a. Level I Concentrations	(b)	•
8b. Level II Concentrations	(b)	
8c. Potential Contamination	(b)	
8d. Population (lines 8a + 8b + 8c)	(b)	- •
9. Resources	5	
10. Wellhead Protection Area	20	
11. Targets (lines 7 + 8d + 9 + 10)	(b)	
Ground Water Migration Score for an Aquifer:	` ,	
12. Aquifer Score [(lines 3 x 6 x 11)/82,5000] ^c	100	. 0
		-,
Ground Water Migration Pathway Score:		
13. Pathway Score (S _{gw}), (highest value from line 12 for all aquifers evalua	ited) ^c 100	. 0

a Maximum value applies to waste characteristics category
b Maximum value not applicable
c Do not round to nearest integer

Factor categories and factors	NT SCORESHEET Maximum	Value A	ssigned
ractor categories and ractors	Value	Value A	ssigned
Watershed Evaluated:			
Drinking Water Threat			•
Likelihood of Release:	==0	_	•
1. Observed Release	550	0 .	
Potential to Release by Overland Flow:			
2a. Containment	10		
2b. Runoff	10		
2c. Distance to Surface Water	- 5		
2d. Potential to Release by Overland Flow [lines 2a(2b + 2c)]	35		
3.Potential to Release by Flood:	,		
3a. Containment (Flood)	10		•
3b. Flood Frequency	50		
3c. Potential to Release by Flood (lines 3a x 3b)	500		•
4. Potential to Release (lines 2d + 3c, subject to a maximum of 500)	500		
5. Likelihood of Release (higher of lines 1 and 4)	550		0
Naste Characteristics:	•		
6. Toxicity/Persistence	(a)	•	
7. Hazardous Waste Quantity	(a)		
8. Waste Characteristics	100	•	. 0
argets:			Ū
9. Nearest Intake	50		
10. Population:			
10a. Level I Concentrations	(b)		
·			
10b. Level II Concentrations	(b)		
10c. Potential Contamination	(b)		
10d. Population (lines 10a + 10b + 10c)	(b)		
11. Resources	5		
12. Targets (lines 9 + 10d + 11)	(b)		
Prinking Water Threat Score:			
13. Drinking Water Threat Score [(lines 5x8x12)/82,500, subject to a max of 100]	100		0
Human Food Chain Threat			
ikelihood of Release:			
14. Likelihood of Release (same value as line 5)	550		0
Naste Characteristics:	•	-	
15. Toxicity/Persistence/Bioaccumulation	(a)		
16. Hazardous Waste Quantity	(a)	.0	
17. Waste Characteristics	1000		0
argets:			
18. Food Chain Individual	50		
19. Population			
19a. Level I Concentration	(þ)	•	
19b. Level II Concentration	(b)		
19c. Potential Human Food Chain Contamination	(b)		
19d. Population (lines 19a + 19b + 19c)	(b)		
20. Targets (lines 18 + 19d)	(b)		
luman Food Chain Threat Score:	(5)		
21. Human Food Chain Threat Score [(lines 14x17x20)/82500, subject to max of 100]	100	•	0
Environmental Threat	ΙΟŲ		U
ikëlihood of Release:	FFA		
22. Likelihood of Release (same value as line 5)	550		. 0
Vaste Characteristics:			
23. Ecosystem Toxicity/Persistence/Bioaccumulation	(a)		-
24. Hazardous Waste Quantity	(a)	0	
25. Waste Characteristics	1000		

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т.	20	~	•	•	٠
- 1	a.	a	ш	LЭ	۰

26. Sensitive Environments	•	
26a. Level I Concentrations	(b)	
26b. Level II Concentrations	(b)	
26c. Potential Contamination	(b)	
26d. Sensitive Environments (lines 26a + 26b + 26c)	(b)	
27. Targets (value from line 26d)	(b)	•
Environmental Threat Score:		
28. Environmental Threat Score [(lines 22x25x27)/82,500 subject to a max of 60]	60	. 0
Surface Water Overland/Flood Migration Component Score for a Watershed		
29. Watershed Score ^c (lines 13+21+28, subject to a max of 100)	100	0
Surface Water Overland/Flood Migration Component Score		
30. Component Score (S _{sw}) ^c (highest score from line 29 for all watersheds evaluated)	100	

a Maximum value applies to waste characteristics category Maximum value not applicable C Do not round to nearest integer

TABLE 4-25 GROUND WATER TO SURFACE WATER MIGR. Factor categories and factors	Maximum Value	Value Assigned
	iviaximum_value	value_Assigned
equifer Evaluated: Drinking Water Threat		
ikelihood of Release to an Aquifer:		
	550	0
Observed Release Potential to Release:	550	0
		•
2a. Containment	10	
2b. Net Precipitation	10	
2c. Depth to Aquifer	5	
2d. Travel Time	35	
2e. Potential to Release [lines 2a(2b + 2c + 2d)]	500	,
3. Likelihood of Release (higher of lines 1 and 2e)	550	<i>;</i> . (
aste Characteristics:		
4. Toxicity/Mobility	(a)	
5. Hazardous Waste Quantity	(a)	
6. Waste Characteristics	100	(
argets:		
7. Nearest Well	(b)	
8. Population:		•
8a. Level I Concentrations	(b)	
8b. Level II Concentrations	(b)	
8c. Potential Contamination	(b)	
8d. Population (lines 8a + 8b + 8c)	(b)	
9. Resources	5	
10. Targets (lines 7 + 8d + 9)	(b)	
rinking Water Threat Score:	(2)	
11. Drinking Water Threat Score ([lines 3 x 6 x 10]/82,500, subject to max of	100) 100	
Human Food Chain Threat	1007	
ikelihood of Release:		
12. Likelihood of Release (same value as line 3)	550	(
/aste Characteristics:	550	,
13. Toxicity/Mobility/Persistence/Bioaccumulation	(5)	
	(a)	0
14. Hazardous Waste Quantity	(a)	0 .
15. Waste Characteristics	1000	. (
argets:		
16. Food Chain Individual	50	
17. Population		
17a. Level I Concentration	(b)	
17b. Level II Concentration	(b)	
17c. Potential Human Food Chain Contamination	(b)	
17d. Population (lines 17a + 17b + 17c)	(b)	
18. Targets (lines 16 + 17d)	(b)	
uman Food Chain Threat Score:		
19. Human Food Chain Threat Score [(lines 12x15x18)/82,500,suject to max	of 100] 100	. (
Environmental Threat		
kelihood of Release:	•	•
20. Likelihood of Release (same value as line 3)	550	(
aste Characteristics:	, 555	•
21. Ecosystem Toxicity/Persistence/Bioaccumulation	(a)	
22. Hazardous Waste Quantity	i i	0
· · · · · · · · · · · · · · · · · · ·	(a)	2
23. Waste Characteristics	1000	. (
argets:	•	• •
24. Sensitive Environments	•	
24a. Level I Concentrations	(b)	
24b. Level II Concentrations	(b)	

24d. Sensitive Environments (lines 24a + 24b + 24c)	(b)		•
25. Targets (value from line 24d)	(b)	•	
Environmental Threat Score:			
26. Environmental Threat Score [(lines 20x23x25)/82,500 subject to a max of 60]	60		0
Ground Water to Surface Water Migration Component Score for a Watershed			
27. Watershed Score ^c (lines 11 + 19 + 28, subject to a max of 100)	100		0
28. Component Score (S _{gs}) ^c (highest score from line 27 for all watersheds evaluated,	100		0

a Maximum value applies to waste characteristics category
b Maximum value not applicable
c Do not round to nearest integer

TABLE 5-1SOIL EXPOSURE PATH	WAY SCORESHEET		<u> </u>
Factor categories and factors	Maximum Value	Value A	ssigned
Likelihood of Exposure:			
1. Likelihood of Exposure	550	•	550
Waste Characteristics:			
2. Toxicity	(a)	10000	· · · · · · · · · · · · · · · · · · ·
Hazardous Waste Quantity	(a)	1	
4. Waste Characteristics	100		10
Targets:			
5. Resident Individual	50	. 0	
6. Resident Population:			•
6a. Level I Concentrations	(b)	. 0	
6b. Level II Concentrations	(b)	0	•
6c. Population (lines 6a + 6b)	(b)	0	
7. Workers	15	5	
8. Resources	. 5	0	
9. Terrestrial Sensitive Environments	(c)	. 0	
10. Targets (lines 5 + 6c + 7 + 8 + 9)	(b)		5
Resident Population Threat Score	,		
11. Resident Population Threat Score (lines 1 x 4 x 10)	(b)	•	27500
Nearby Population Threat		-	
Likelihood of Exposure:	•		
12. Attractiveness/Accessibility	100	10	
13. Area of Contamination	100	5	
14. Likelihood of Exposure	500	•	5
Waste Characteristics:	•		
15. Toxicity	(a)	10000	
16. Hazardous Waste Quantity	(á)	1	
17. Waste Characteristics	100		10
Targets:		•	
18. Nearby Individual	Ï	Ò	
19. Population Within 1 Mile	(b)	2817	
20. Targets (lines 18 + 19)	(b)		2817
Nearby Population Threat Score	,		
21. Nearby Population Threat (lines 14 x 17 x 20)	(b)	•	140850
Soil Exposure Pathway Score:	* * * * * * * * * * * * * * * * * * *		
22. Pathway Scored (S _s), [lines (11+21)/82,500, subject to max of 100]	100		2.04

a Maximum value applies to waste characteristics category
b Maximum value not applicable
c No specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to a maximum of 60 d Do not round to nearest integer

Table 6-1 Air Migration Pathway Scoresheet			
Factor categories and factors	_ Maximum Value	Value As	signed
Likelihood of Release:			
1. Observed Release	550	0	
2. Potential to Release:			
2a. Gas Potential to Release	500		•
2b. Particulate Potential to Release	500		
2c. Potential to Release (higher of lines 2a and 2b)	500		
3. Likelihood of Release (higher of lines 1 and 2c)	550	4.5	0
Waste Characteristics:			•
4. Toxicity/Mobility	· (a)		
5. Hazardous Waste Quantity	(a)		
6. Waste Characteristics	100		•
Targets:		•	
7. Nearest Individual	50		
8. Population:			
8a. Level I Concentrations	(b)		
8b. Level II Concentrations	(b)	•	
8c. Potential Contamination	(c)		•
8d. Population (lines 8a + 8b + 8c)	(b)		
9. Resources	5		
10. Sensitive Environments:	-		
10a. Actual Contamination	(c)	•	
10b. Potential Contamination	(c)		4 · · · · · · · · · · · · · · · · · · ·
10c. Sensitive Environments (lines 10a + 10b)	(c)		•
11. Targets (lines 7 + 8d + 9 + 10c)	(b)		
Air Migration Pathway Score:	(-/		
12. Pathway Score (S _a) [(lines 3 x 6 x 11)/82,500] ^d	100		Ö

^a Maximum value applies to waste characteristics category
^b Maximum value not applicable
^cNo specific maximum value applies to factor. However, pathway score based solely on sensitive environments is limited to a maximum of 60.
^d Do not round to nearest integer